



Designing and Managing Fisheries Data Systems that Support the NOAA Data Quality Act: A Case Study Using the Hawaii Longline Observer Program

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NOAA Fisheries - Pacific Islands Fisheries Science Center

Honolulu, Hawaii

FIS Conference 2003

18 November 2003



Asking the Hard Questions...

- Can I prove that my data is as good as I think it is?
- Do I really know why we've been collecting that piece of data for the past ten years?
- Do I worry that my data will be misinterpreted when it is released?
- Can I really be sure that my data hasn't been corrupted?
- Do I dread running into my data users in the coffee room?
- Can I handle even a minor system modification?
- Is linking related data sets a nightmare?
- Are my users all reporting off the same instance of the data?



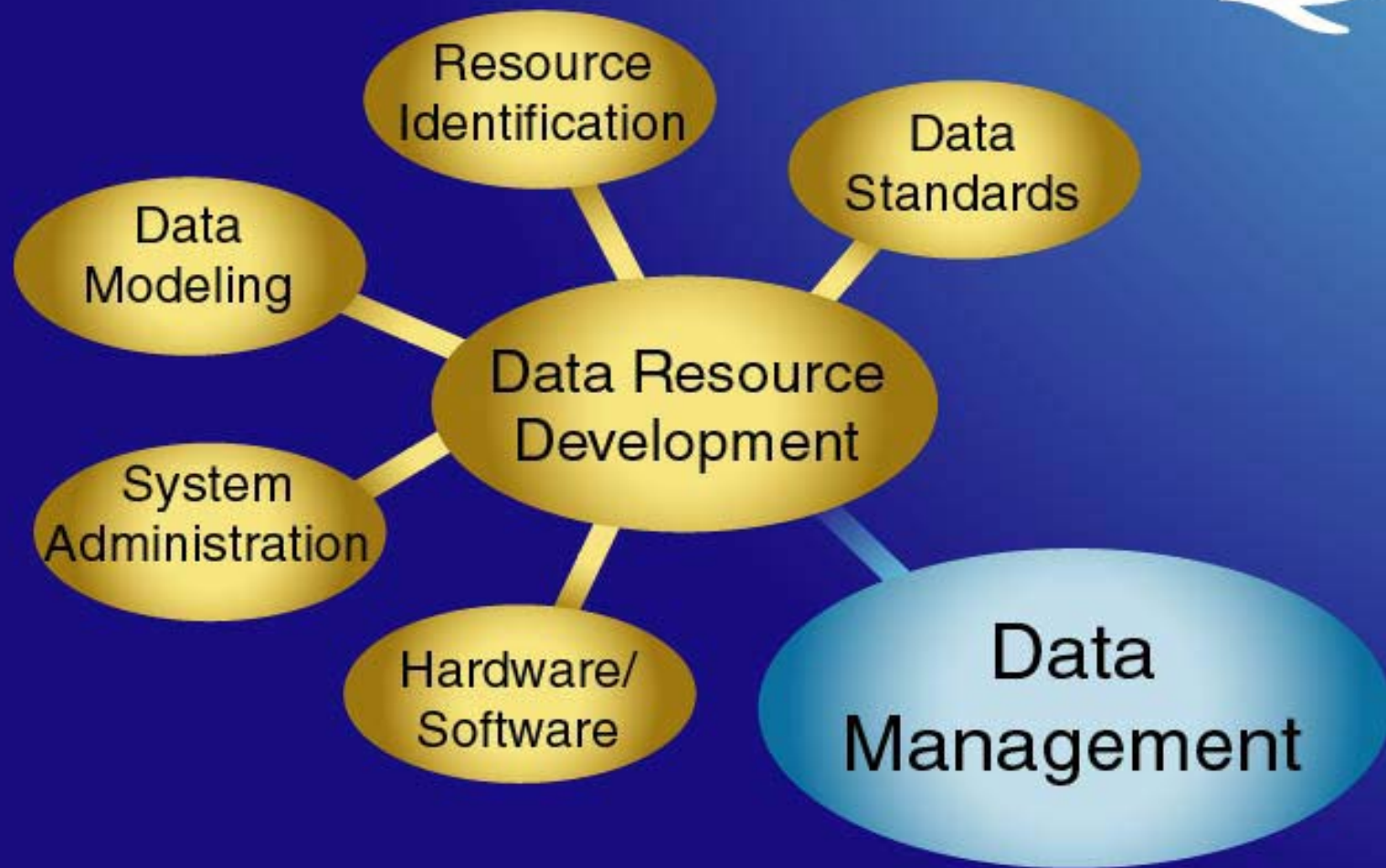
A Mission Born out of Passion and Frustration...

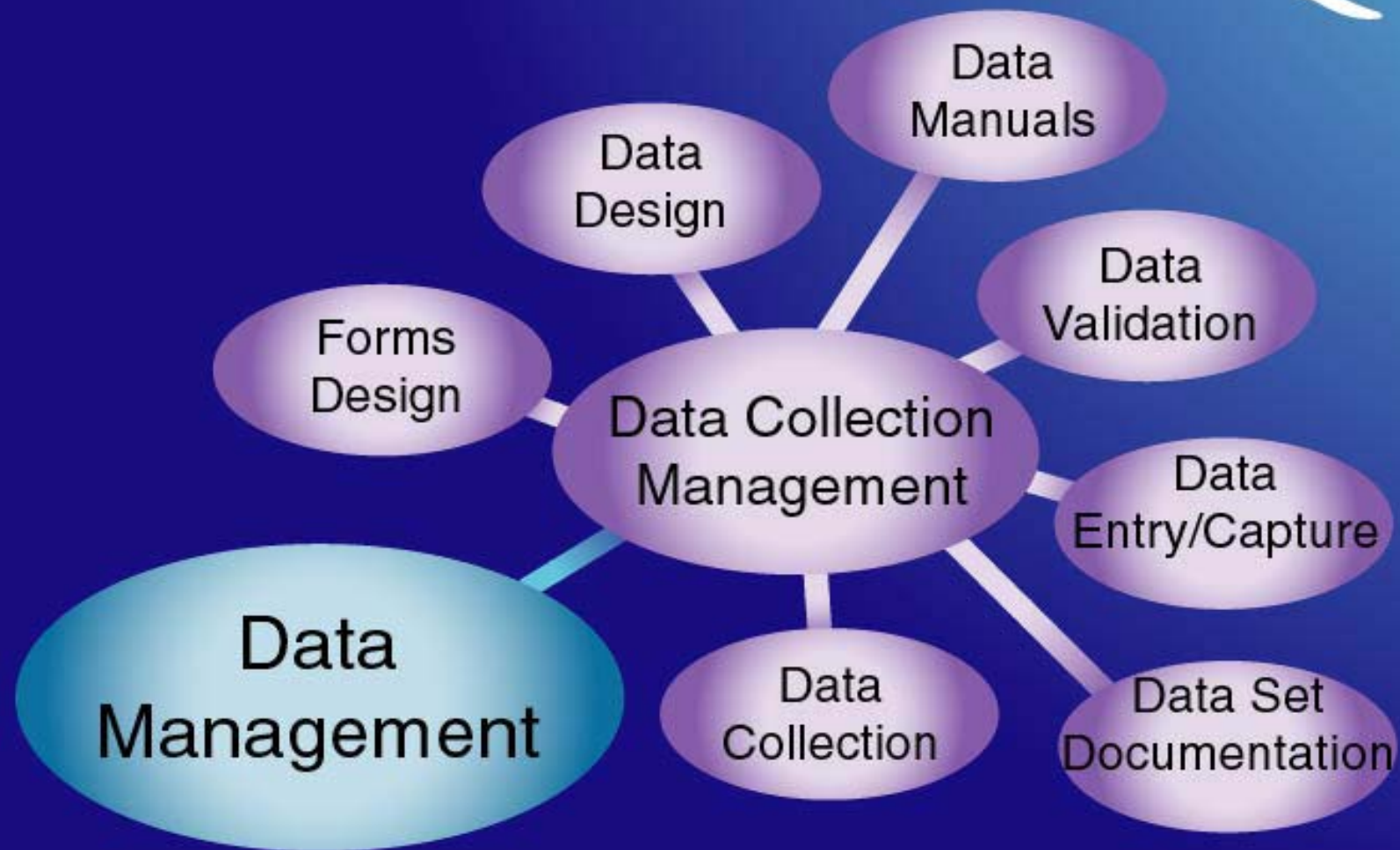
- Poor data quality
- Data contamination during processing steps
- Inadequate documentation
- No change control procedures
- Poor communication between data role groups
- Unreasonable time for data dissemination
- Summary reporting from multiple – and different – data sources

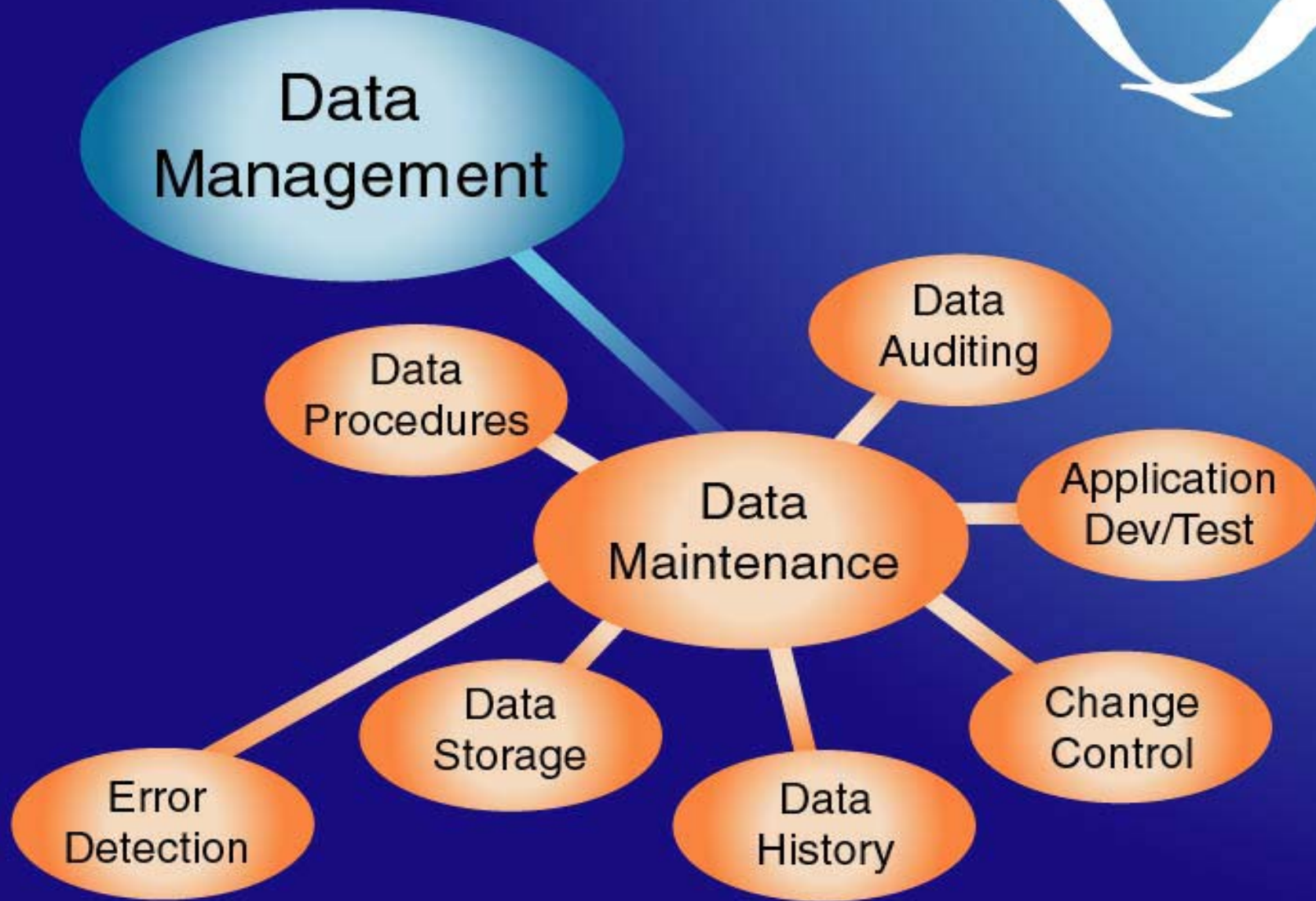


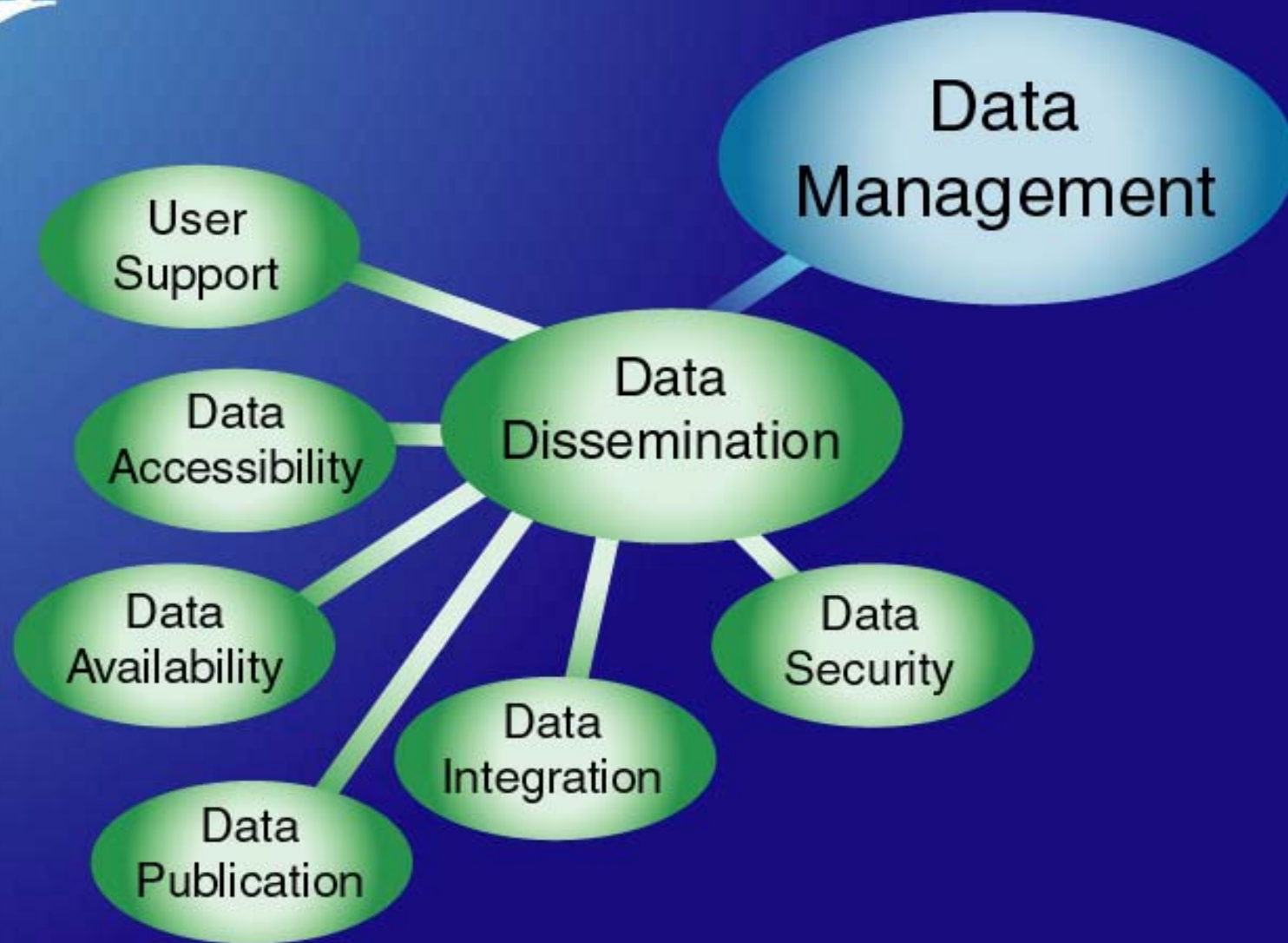
What Is Data Management?

It's Not Just Archiving!

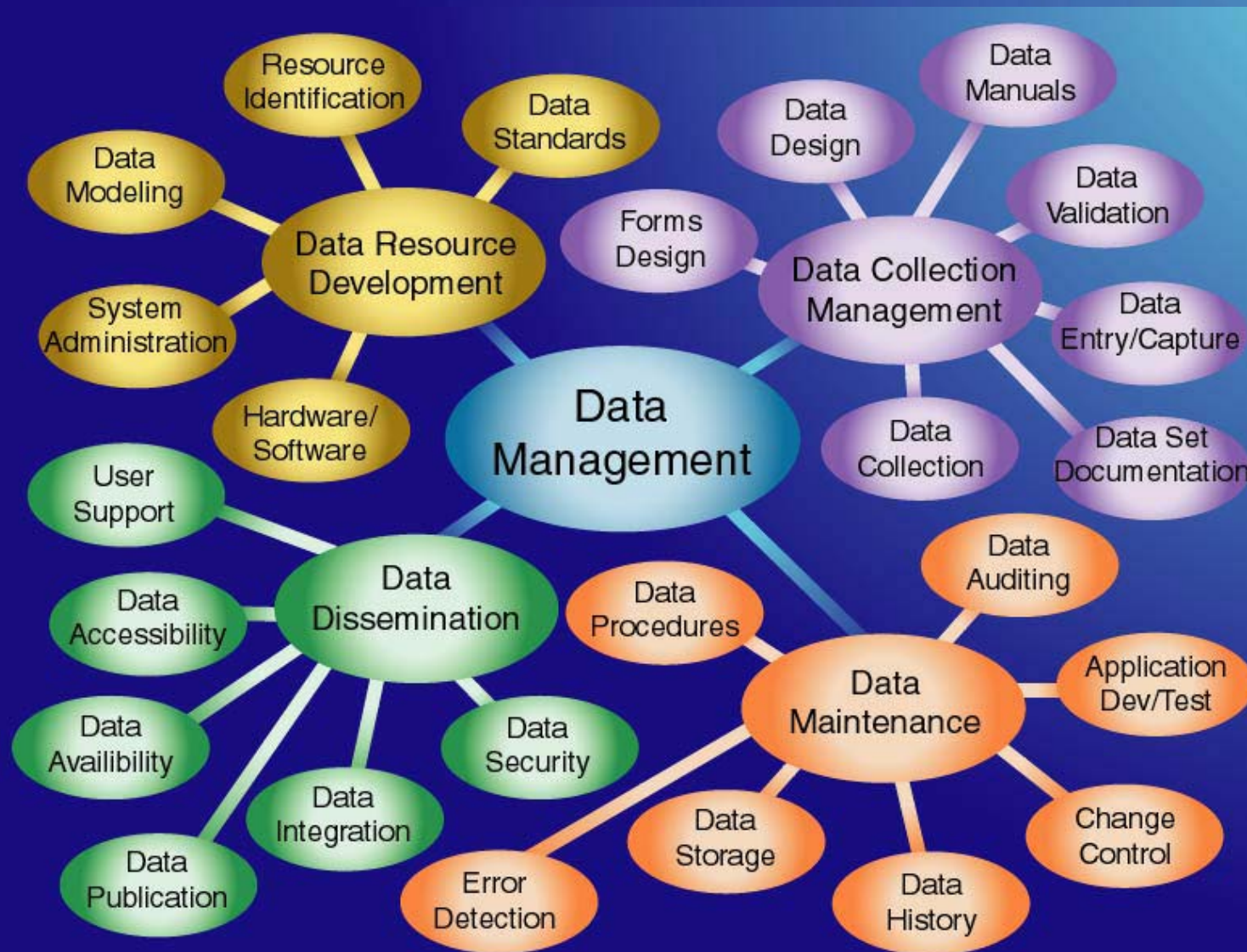








Data Management Areas



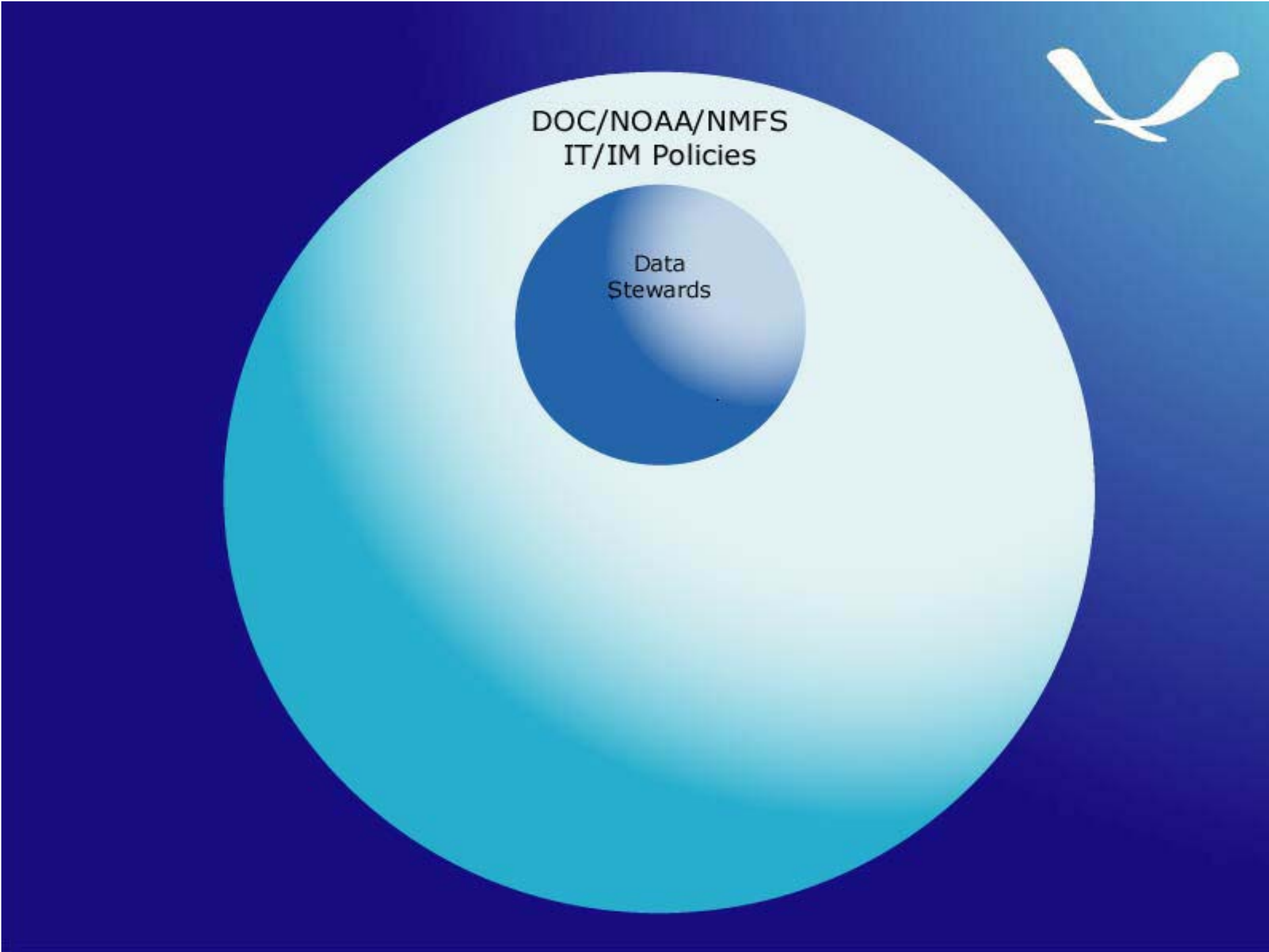


Who Is Responsible for Data Management?

All data role groups!

DOC/NOAA/NMFS
IT/IM Policies





DOC/NOAA/NMFS
IT/IM Policies

Data
Stewards



DOC/NOAA/NMFS
IT/IM Policies

Data
Stewards

Data
Managers

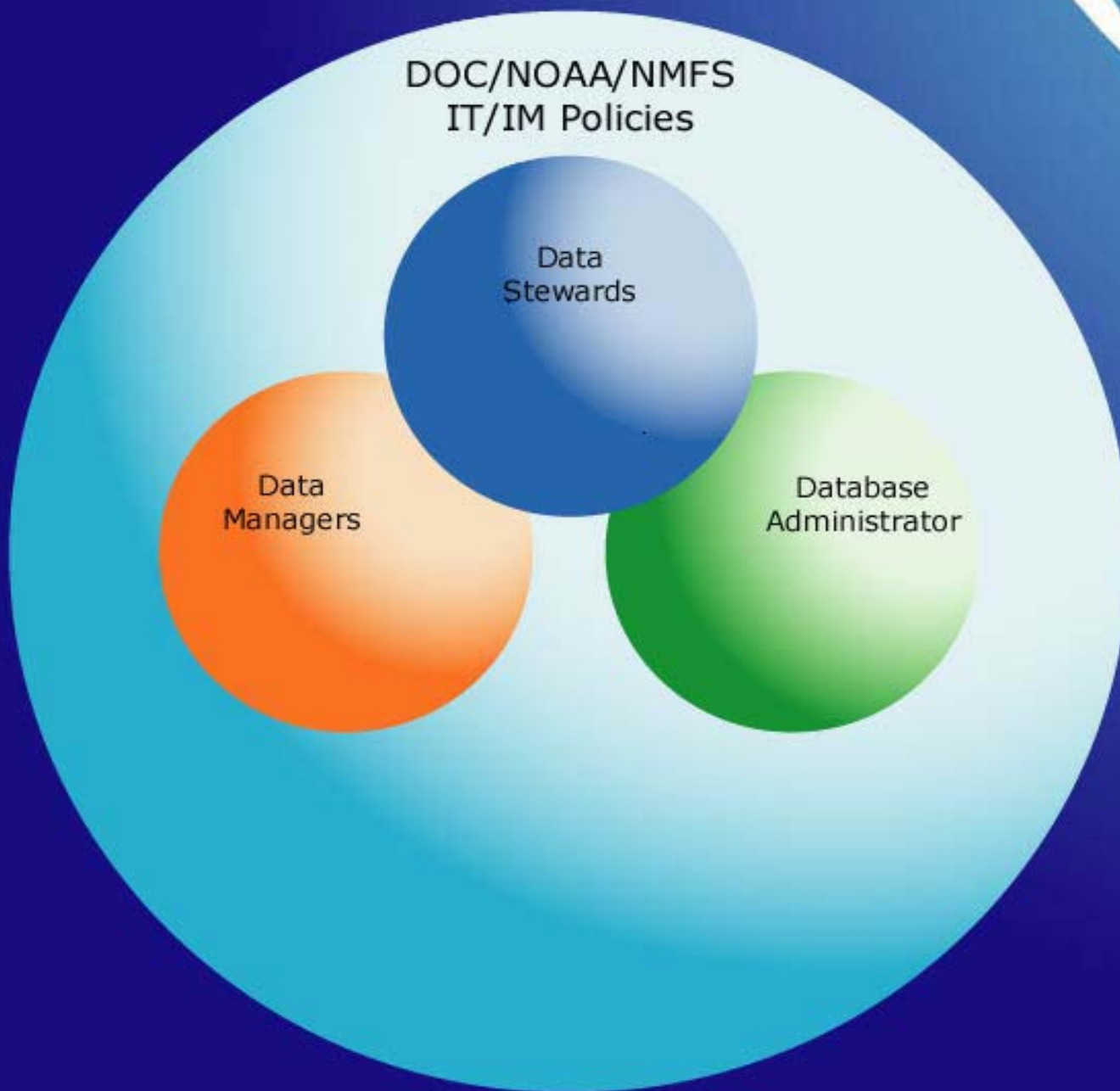


DOC/NOAA/NMFS
IT/IM Policies

Data
Stewards

Data
Managers

Database
Administrator





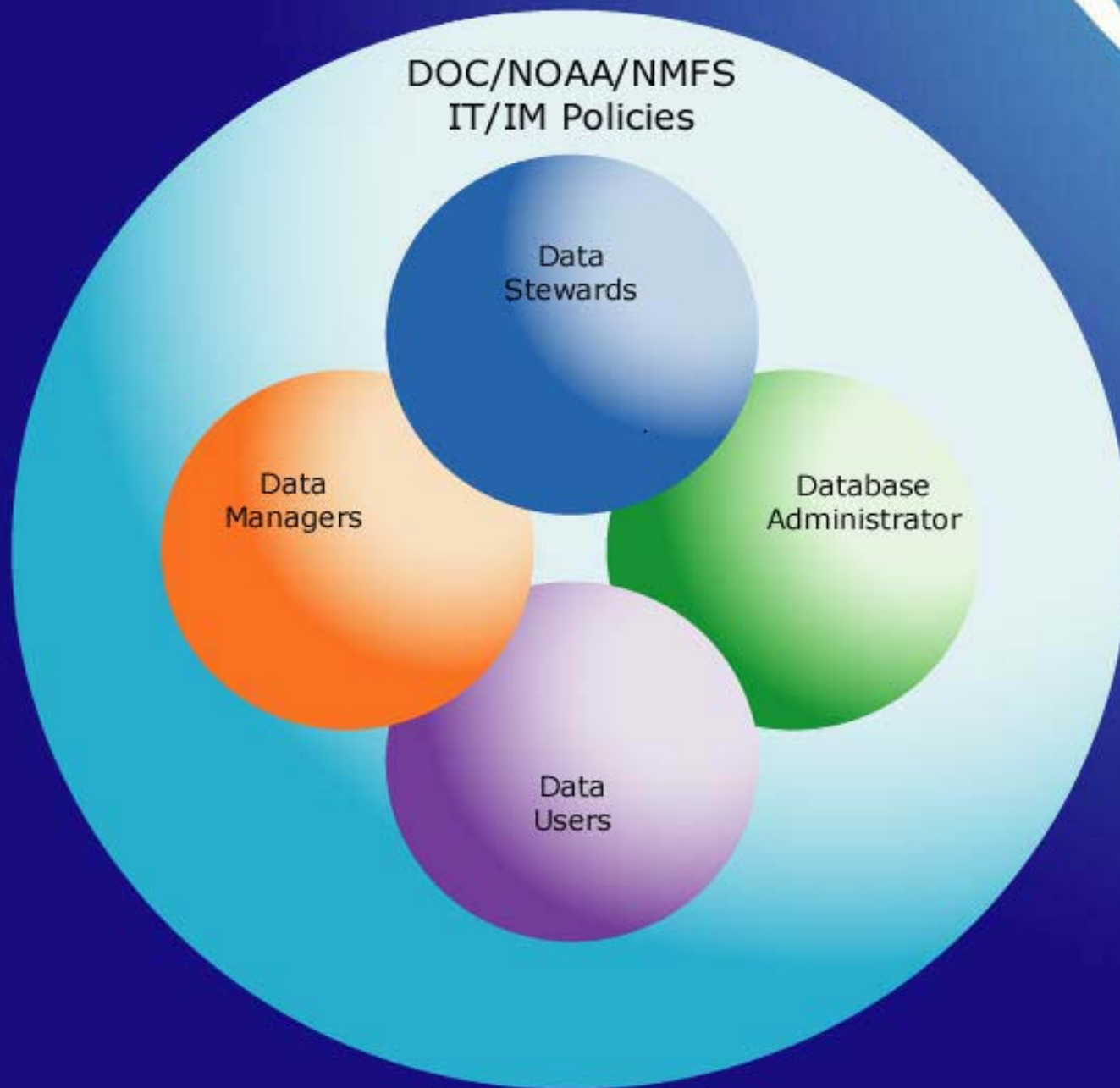
DOC/NOAA/NMFS
IT/IM Policies

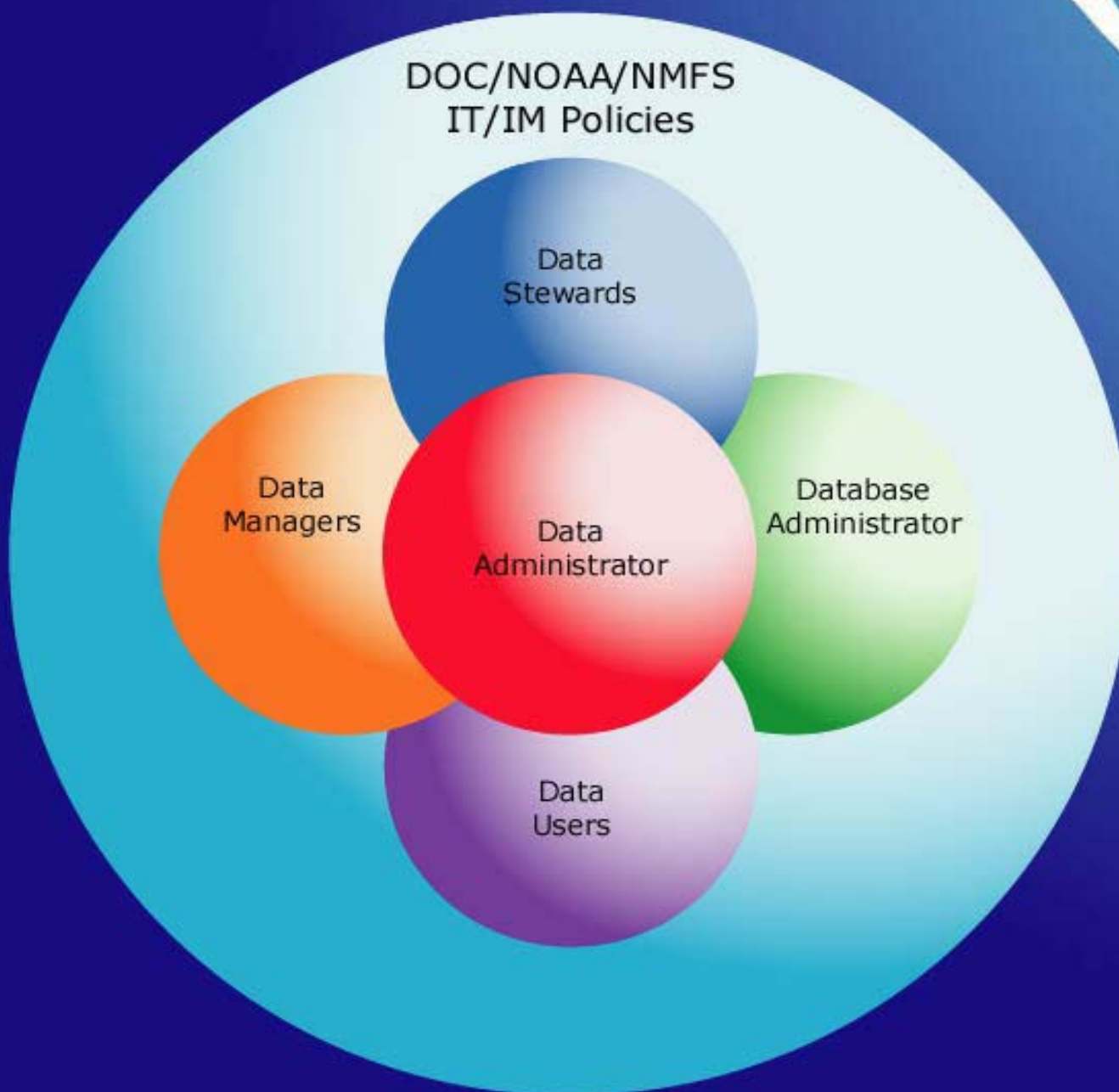
Data
Stewards

Data
Managers

Database
Administrator

Data
Users







Our Mission...

Ensure access and dissemination of quality Fisheries data and metadata to appropriate users in a timely manner.

The Technical Team

Jan Pappas:

- PIFSC systems DBA
- Oracle Project Team member

Karen Sender:

- JIMAR contractor
- DBA/Computer Specialist for ITS Oracle Team
- Scientific Information Systems background



Our Ground Rules...

- Look for data management resources that already exist
- Commit to data quality and data transparency
- Develop reusable data management tools



Our Ground Rules ...(cont.)

- Involve all the data role groups
- Adopt the data stewardship paradigm
- Design in process improvement schemes
- Minimize points-of-failure



Our Ground Rules ...(cont.)

- Completely document every aspect of the data system
- Provide data management education at every opportunity
- Keep it simple
- Try the plan on an existing data system



Hawaii Longline Observer Program

- Collecting data since 1994
- 5-25% coverage of Hawaii Longline fishing trips
- Related data sets – Logbook, landings
- Post trip data entry by the observer in office

The Support Team

Stuart “Joe” Arceneaux:

- PIRO Observer Training Coordinator

Thomas Swenarton:

- PIRO Debriefing

Tina Chang:

- FIS IT Coordinator/DBA
- NASDAQ and NASA Hubble systems development

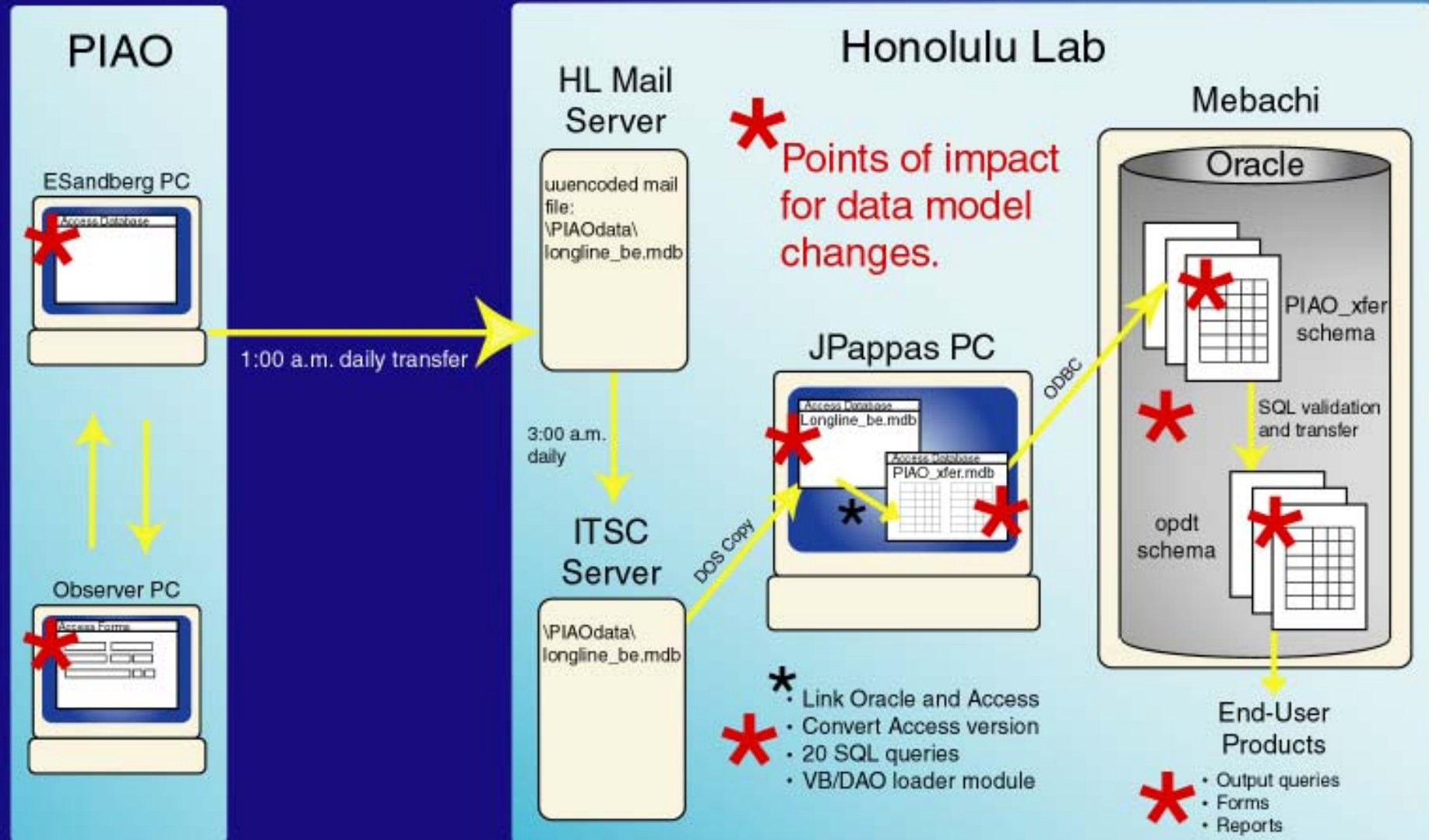
Data Role Group Concerns of the Existing System



- End User complaints on data quality
- No clearly defined process for reporting/resolving data issues
- Database model deficiencies
- Excessive points-of-failure
- Data transfer arduous
- Labor intensive effort for any system modification
- Redundant and ambiguous data elements
- Burden on data collectors



Observer Electronic Data Flow



Data Role Group Concerns of the Existing System



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Team Focus Areas

- Data Quality
- Ease of Use (collection and data entry)
- Data Management at the source (PIRO)
- Data Security
- System reliability and stability
- Data Harmony with national FIS objectives
- Compliance with NOAA Data Quality Act

Data Quality

- Document definitions for all data elements
- Develop Data Issues Management tool
- Develop and enforce change control procedures
- Track Data set history/activities
- Promote the Data Stewardship model





Ease of Use

- Use web based interface
- Design in data validation at data entry
- Develop user controlled data set validation scheme
- Secure web interface using database roles
- Design user friendly feedback and error messaging

Data Management at the Source

- Administration tools at PIRO to manage
 - reference codes
 - validation algorithms
 - users
 - database roles
 - Project circulars, activities log, news, FAQ





Data Security

- Each data entry person and debriefer to log on with own user name and password
- Database user roles to provide appropriate read, insert, update, and delete privileges
- History – who, when, what – for each database transaction to be maintained in the database
- Use NOAA FITS approved technologies

System Reliability

- Connection between PIRO and HL is through direct T1 line, independent of internet
- Reduction in number of points-of-failure
- Automated nightly backup of database



Harmony with National FIS

- Design to consider ACCSP(FIS) data structure and objectives
- Standardize field names and data types
- Manage metadata for all data elements in a data registry



NOAA Data Quality Act

- Requires a process for reporting/resolving errors
- Requirement for data transparency, quality, integrity, and utility
- Need for clearly defined data management practices





Accomplishments to Date

- Improved communication between data role groups
- Improved data quality and data utility
- Better data, happier users
- Additional data in the enterprise database
- Elimination of redundant data items
- Computer calculation replaces human calculations



Accomplishments (cont.): Data Model Enhancements

- Model design that ensures data stability and integrity
- Use of appropriate data types to facilitate summary calculations
- Data history tables track inserts, updates and deletes as well as who, when and what data was changed
- Reference code management allows code changes without model changes



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin



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LODS Longline Observer Data System - Netscape 6

File Edit View Search Go Bookmarks Tasks Help

http://itsi.nmfs.hawaii.edu:7777/htdocs/lop/html/lods.html


NOAA Fisheries Pacific Islands Region Longline Observer Data System

Today is Friday, October 17, 2003

Date: 15 OCT 2003 04:10
To: LODS users
From: KSender, JPappas

Please check out the LODS FAQs (Frequently Asked Questions), now available online from the LODS home page. Lots of helpful hints for entering your data. New questions and answers are added as the need arises.

- LODS
- LODS FAQs
- LODS News Archives
- Codes
- Manual
- Forms
- Resources
- LOP Update Circulars
- Data Issues
- Validation List
- Data Error Messages
- Data Validation Manager
- System Administration
- Tech Support
- LODS Trainer



DOC | NOAA | PIRO | PIFSC | Privacy | Security
LODS Home | LODS Pub | LODS Admin
Last updated: Fri, 17 Oct 2003 22:51:44 GMT

Document: Done (0.453 secs)





Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin

Trip Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Trip Status Validation Window Help

00:01 NORMAL

Longline Observer Data System

National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

Delete Save Add Trip << First < Prev Next > Last >>

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PIRO STAFF
Approved Date 26-MAR-2003

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

Vessel Information

Vess Doc No. 689668 Vessel Name F/V HAWAII POWER Vessel Length 74 Vessel Operator STEVEN J. HO

First Name Middle Initial Last Name

Trip Times and Port Stops

Departure Date/Time 08-MAR-2003 12:15 Departure Port HONOLULU

Intermediate Port Stops

Delete Save

Stop No.	Stopped	Resumed	Stop Port

24-MAR-2003 22:30 HONOLULU

Arrival Date/Time Arrival Port

Show... Last Query

Less... Trip/Vessel Items

Num Bunks 5
Num Reels 2
Reel1 Diam 38.4
Reel2 Diam 36.6
Radar? ☒
Shooter? ☒
Gps? ☒
Heads? ☒
Ssb? ☒
Delete Vessel Cfg Items

Hide... Record Details

Trip Created By NEMOBS
Create Date 18-JUN-2003
Last Mod By NEMOBS
Last Mod Date 25-JUN-2003
Tab Vers 9.0
Menu Vers 1.0

Trip Comments

Loading VESSEL_CFG....

Record: 1/1 Enter-Qu...

Set Tab



Action Edit Query Trip Status Validation Window Help

Longline Observer Data Entry

Longline Observer Data System
National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

00:00 NORMAL

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PERO STAFF
Approved Date 26-MAR-2003

Delete Save Add Trip << First < Prev Next > Last >>

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

00:01 Sets Set Record: 1/1 Set # 9 Logbook Page 232864

Delete Save Add << First < Prev Next > Last >>

Set and Haul Information

Begin Set
Date/Time 18-MAR-2003 08:30
Latitude 25 22.0 N
Longitude 157 15.5 W
Weather Code
Beaufort Scale 3
Sea Temperature 74.9

End Set
Date/Time 18-MAR-2003 13:00
Latitude 25 36.5 N
Longitude 156 46.0 W
Weather Code
Beaufort Scale
Sea Temperature 74.0

Begin Haul
Date/Time 18-MAR-2003 17:18
Latitude 25 31.4 N
Longitude 156 46.6 W
Weather Code
Beaufort Scale 2
Sea Temperature 74.7

End Haul
Date/Time 19-MAR-2003 00:57
Latitude 25 22.0 N
Longitude 157 15.2 W
Weather Code
Beaufort Scale
Sea Temperature 75.0

Less... Record Items
Obs. Soak Time 16
Calc. Soak Time 16

Hide... Record Details
Set Created By NEO083
Create Date 18-JUN-2003
Last Mod By NEO083
Last Mod Date 18-JUN-2003
Tab Vers 9.0
View Vers 1.0

Set/Haul Events
Line Parted? ☐
Haulback Dir. Code 02 Num Sections Retr'd
End Set Set Interact? ☐
Haul Interact? ☒

set speed and target depth unknown,
weights 45,60, and 80 but mostly 80

Set/Haul Comments

Set and Haul
Gear Config
Bird Mitigation
Catch Records
Birds
Turtles
Specimens
Tag Events

Set Number: Sets are numbered consecutively for each observed trip beginning with 01.

Issues Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Trip Status Validation Window Help

00:00 NORMAL

Longline Observer Data System
National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

Delete Save Add Trip << First < Prev Next > Last >>

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PIRO STAFF
Approved Date 26-MAR-2003

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

Trip Data Issues

Status	Table Name	PKey Field	PKey Value	PKey Field	PKey Value	Error Field	Err Data	Proposed Correction	Correction
CORRECTED	OBSPTSITAB	SET#				CONDITION	A	I	I

animal was released injured

changed

Rptd By TSGIENARTON
Rpt Date 18-APR-2003
Rvwd By TSGIENARTON
Rvw Date 18-APR-2003
Target Updated By
Target Updated

Record: 1/1 Enter-Qu...

44

Trip Summary Tab



Action Edit Query Trip Status Validation Window Help

Longline Observer Data Entry

00:00 NORMAL

Longline Observer Data System
National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVE
Approved By PIRO ST.
Approved Date 26-MAR-

Delete Save Add Trip << First < Prev Next > Last >>

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

Trip Summary Data											
Set#	Hrs	Fts	Caught	Kept	Alive	Dead	Finned	Unknown	Billfish	Shark	Tuna
1	2150	90	37	17	1	19	0	0	5	1	5
2	2150	90	35	23	1	11	0	0	4	1	5
3	2150	90	25	13	1	11	0	0	3	1	5
4	2150	90	46	31	2	13	0	0	9	2	3
5	1700	71	26	19	1	6	0	0	6	2	3
6	2150	90	35	26	2	7	0	0	6	5	5
7	2125	89	38	12	4	22	0	0	3	6	3
8	2150	90	17	10	1	6	0	0	4	4	1
9	2125	90	22	13	1	7	0	0	6	3	4
10	2125	90	16	7	2	6	0	0	1	4	0
11	2125	89	39	19	3	17	0	0	4	8	5
12	2150	90	17	10	0	7	0	0	3	0	2
13	2075	87	15	9	0	6	0	0	0	3	1
14	2050	85	16	8	1	7	0	0	2	3	1

Record: 1/14 Enter-Qu...

Catch Tab



Action Edit Query Trip Status Validation Window Help

Longline Observer Data Entry

00:00 NORMAL

Longline Observer Data System
National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

Observer ID: 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PIR0 STAFF
Approved Date 26-MAR-2003

Delete Save Add Trip << First < Prev Next > Last >>

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

00:01

Set Record: 1/1 Set # 9 Logbook Page 232864

Delete Save Add << First < Prev Next > Last >>

00:01

Catch Records
Record: 7/22

Delete Save

Page	Line	English Name	Sp. Code	Float #	Hook #	Cnd	K/R Dmg	Cd	ynu	G'dr	C1	M1	C2	M2	C3	M3	C4	M4	Tg	Sp	Ph	Sk	Cm
0	1	SHORTEBILL SPEARFISH	094	15	1		K N																
0	2	SHORTEBILL SPEARFISH	094	18	25		K N																
0	3	BIG EYE TUNA	916	21	20		K N																
0	4	BIG EYE TUNA	916	24	8		K N																
0	5	STRIPED MARLIN	092	29	1		K N																
0	6	YELLOWFIN TUNA	001	29	21		K N																
0	7	LEATHERBACK SEA TURTLE	DC	42	6	D																	
0	8	YELLOWFIN TUNA	001	47	12		K N																
0	9	STRIPED MARLIN	092	61	23		K N																
0	10	BLUE SHARK	167	64	12		D N				AL	5											
0	11	SHORTFIN MAKO (MACKEREL SHARK)	151	68	19		K N																
0	12	BLUE SHARK	167	72	14		A N				AL	6											
0	13	STRIPED MARLIN	092	80	2		K N																
0	14	SWORDFISH	091	80	4		K N																
0	15	OILFISH	014				K N																

Less... Record Items

Precaudal Len
Clasper Inner Len
Fork Len
Cleithrum Keel
Alt Meas
Eye Fork
Total Len
Alternate Len
Half Girth

Hide... Record Details

Created By
Create Date
Last Mod By
Last Mod Date
Tab Vers 9.0
View Vers 1.0

Set and Haul
Gear Config
Bird Mitigation
Catch Records
Birds
Turtles
Specimens
Tag Events

Camera #LL0977. Frames ~18-9. Turtle was approx. 6-7 ft. in length. Samples were taken

Trip Comments

Birds Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Trip Status Validation Window Help

Longline Observer Data Entry

Longline Observer Data System

National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

00:00 NORMAL

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PIR0 STAFF
Approved Date 26-MAR-2003

Delete Save Add Trip << First < Prev Next > Last >>

Trip Info Sets P.S.I. Images Issues Log Tri

00:01 Set Record

Set # 10 Logbook Page 232865

Delete Save Add << First

Bi

Species Code dNG BLACK-FOOTED ALBATROSS

Save

Catch Form Page No. 0
Catch Form Line No. 3

Set and Haul
Gear Config
Bird Mitigation
Catch Records
Birds
Turtles
Specimens
Tag Events

Capture/Begin Event

Date/Time Latitude Longitude Landed ? Tags Present

Release/End Event

Date/Time Latitude Longitude Disposition Code

Hooking/Entanglement

Hooked N Entangled Y

Hooked Location Code Entangled Location Code

Gear Removal Type Code 98 Unrecorded (legacy d

Gear Still Attached Code

Gear Attached Descrip

Morphology

Bill Color Code Mantle Color Code Head Color Code

Tip of bill is different color from the rest of the bill?

Light Device

Color Prox.

Less... Record Items

Hk Num 24
Fit Num 72
Caught Cond I
Photo?
Tag Recaptured?
Specimen ID#

Hide... Record Details

Created By NEM0BS
Create Date 30-JUN-2003
Last Mod By NEM0BS
Last Mod Date 30-JUN-2003
Tab Vers 9.0
View Vers 1.0

The Blackfooted Albatross Comments

Injures
Descrip.
Ident.
Charact.

Editor

The Blackfooted Albatross was alive.
The gear was removed from its leg
and was released. It flew off
seeming okay. 25 32N, 156 36W

OK Cancel Search

Record: 1/1 Enter-Qu...

Turtles Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Trip Status Validation Window Help

Longline Observer Data Entry

Longline Observer Data System
National Marine Fisheries Service
Pacific Islands Region
Longline Observer Program

00:00 NORMAL

Observer ID 848 BASS, COLLEEN M Trip Record: 1/1 Trip No. LL0977

Exit Help

Current User
App. Vers 0.0
Trip Status APPROVED
Approved By PIRO STAFF
Approved Date 26-MAR-2003

Delete Save Add Trip << First < Prev Next > Last >>

Trip Info Sets P.S.I. Images Issues Log Trip History Trip Summary

Sets
00:01 Set Record: 1/1 Set # 9 Logbook Page 232864

Delete Save

Turtles
Species Code DC LEATHERBACK SEA TURTLE Catch Log Page No. 0 Catch Log Line No. 7

Capture/Begin Event
Date/Time 18-MAR-2003 00:00
Latitude 25 18.0 N Landed? ☐
Longitude 156 59.0 W Tags Present N ynu

Release/End Event
Date/Time
Latitude
Longitude
Tag Removed? ☐
Tags Applied? ☐
Disposition Code 04
Died ☐

Hooking/Entanglement
Hooked U ynu Entangled Y ynu
Hooked Location Code
Entangled Location Code
Gear Removal Type Code 98 Unrecorded (legacy)
Gear Still Attached Code
Gear Attached Descrip

Morphology
Rubbery Carapace Y
Overlapping Scutes N
Infra V Pores U
Pair Prefrontal Scales N
Left Costal Scutes 0 Dorsal Color Code 02 Gray
Right Costal Scutes 0
Vertebral Scutes 0 Other Dorsal Color
Inframarginal Scutes 0

Measurements
Carapace Length (curved)
Carapace Width (curved)
Plastron Length (straight)
Tail Len
Carapace Lenith (straight)
Carapace Width (straight)

Light Device
Click the More... button to access these items.
Color Prox.

Less... Record Items
Hk Num 6
Ft Num 42
Caught Cond D
Photo? ☒
Tag Recaptured? ☐
Specimen ID# CMB-T001

Hide... Record Details
Created By MEOBES
Create Date 19-JUN-2003
Last Mod By MEOBES
Last Mod Date 19-JUN-2003
Tab Vers 9.0
View Vers 1.0

Set and Haul
Gear Config
Bird Mitigation
Catch Records
Birds
Turtles
Specimens
Tag Events

Camera #LL0977. Frames
~18-9. Turtle was approx. Comments
The Turtle was dead when brought up along side the Injuries Descrip.

Date Time format: DD-MON-YYYY HH:MM
Record: 1/1 Enter-Qu...



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin

Data Element Registry

Database Information Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

Data Registry - Data Element Form

<< First < Prev Next > Last >>

21/21

Data Element

Element: HAULBACK_CODE Vers. 1.0

Known As: HAULBACK DIRECTION

Status: IN REVIEW

Short Definition

A numeric code (1, 2, or 3) indicating from which end of the longline set the gear haulback was started.

1 = Begin Set, 2 = End Set, 3 = Other

Parent Data Set: OBSLL

Parent Table: OBSSETTAB Vers. 5.0

Schema: OPDT

DB Consultant: JPAPPAS

Data Steward: CBOGGS

Registry ID: 10200

Registry Status: DRAFT

Registry Init Date: 12-JUL-2002

Data Class:

Add Delete Save Clear Exit

DB Info

Data Type: CHARACTER

Stored As: CHAR

Units:

Default Value: None

Input Mask: 9

Display Sample: 3 - Other (Code + Text)

Min Len: 1

Max Len: 1

Decimals:

Case:

PK? ☐

Required? ☐

Col Order: 120

Null Value:

Value Domain

1, 2, 3

Validation Rules

Must be integer between 1 and 3

FK Relations

None

Data Element Registry

Data Collection Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

Data Registry - Data Element Form

<< First < Prev Next > Last >>

21/21

Data Element

Element HAULBACK_CODE Vers. 1.0

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Parent Table OBSSETTAB Vers. 5.0

Schema OPDT

DB Consultant JPAPPAS

Data Steward CBOGGS

Registry ID 10200

Registry Status DRAFT

Registry Init Date 12-JUL-2002

Data Class

Add Delete

Save Clear Exit

Data Collection Reference Info Dates/History Data Access

Data Collection Issues

Data Collection Instructions

Record the number that indicates from which end of the longline set the haulback was started. If 3 (Other), describe in the Notes section or on back of form.

Collection Duration ONGOING

Data Element Registry

References Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

Data Registry - Data Element Form

21/21

Navigation: << First < Prev Next > Last >>

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Known As: HAULBACK DIRECTION

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Schema: OPDT

DB Consultant: JPAPPAS

Data Steward: CBOGGS

Registry ID: 10200

Registry Status: DRAFT

Registry Init Date: 12-JUL-2002

Data Class:

Buttons: Add, Save, Delete, Clear, Exit

Reference Info

Originator: CBOGGS

Mandated? ☐

Mandated By:

Long Definition

Analysis Issues

Data entered as 3 (Other) can mean: 1) Haulback direction not known

References

PIAO Circular Update #48; Confidentiality document LJ-97-01; draft paper by William Walsh, Christofer Boggs (Honolulu Lab);

Info Resources

Cf: Program created by William Walsh (Honolulu Lab) to derive haulback direction for some years and some areas

Justification

To improve data quality on protected species interactions. This information is needed to derive the approximate soak period

Comments

Legacy Data Rules

None (new element)

Data Element Registry History Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

Data Registry - Data Element Form

<< First < Prev Next > Last >>

21/21

Data Element

Element HAULBACK_CODE Vers. 1.0

Known As HAULBACK DIRECTION

Status IN REVIEW

Short Definition

A numeric code (1, 2, or 3) indicating from which end of the longline set the gear haulback was started.

1 = Begin Set, 2 = End Set, 3 = Other

Parent Data Set OBSLL

Parent Table OBSSSETTAB Vers. 5.0

Schema OPDT

DB Consultant JPAPPAS

Data Steward CBOGGS

Registry ID 10200

Registry Status DRAFT

Registry Init Date 12-JUL-2002

Data Class

Add Save Delete Clear Exit

DB Info **Data Collection** **Reference Info** **Dates/History** **Data Access**

Request Date 02-AUG-2001

Approval Date 01-OCT-2001

Effective Date 01-OCT-2001

Review Date 01-OCT-2002

Inactive Date

Effective As Of

Data Element Activities Log

Action		Action Date	Action Taken	Action Taken By
Col Vers	Seq			

Description

Data Element Registry

Data Access Tab



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

Data Registry - Data Element Form

<< First < Prev Next > Last >>

21/21

Data Element

Element HAULBACK_CODE Vers. 1.0

Known As HAULBACK DIRECTION

Status IN REVIEW

Short Definition

A numeric code (1, 2, or 3) indicating from which end of the longline set the gear haulback was started.

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Parent Table OBSSETTAB Vers. 5.0

Schema OPDT

DB Consultant JPAPPAS

Data Steward CBOGGS

Registry ID 10200

Registry Status DRAFT

Registry Init Date 12-JUL-2002

Data Class

Add Delete Save Clear Exit

DB Info **Data Collection** **Reference Info** **Dates/History** **Data Access**

Confid Level
RESTRICTED

Confidentiality Rules

See constraints for table opdt.obssettab and Observer Longline dataset constraints

Access Authorizers

PIAO;HL FDMP; ORACLE DBA

Access Roles

FC056_READ_ROLE



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin



LODS Data Validation

Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

LODS Validation Manager

NOAA Fisheries Pacific Islands Region
Hawaii Longline Observer Program

LODS

Save New << First < Prev Next > Last >>

Validation ID 109 Validation Record: 1/291

Delete

Exit Print Clear

Data System: LODS

Validation Error Code: BILL-CLKEL001

Severity Level: 5

Sort Sequence: 1

Validation Status: LEGACY

Effectv From Date: To

Effectv From Datavers Id: 1001 To

Enforcement Issue? ☐

Exec Method: LOP_VALID pkg (where clause)

Exec Details:

Min Exec Role:

Schema: NEWOBS

Validation View/Table: LOPVAL TRIP BILL T

Validation Scope: Item

Table in Error: LOP BILLFISH LEGACY V

Column in Error: CLEITH KEEL LEN

Primary Keys Name: trip-set-seqnum

Test Validations

Run Status Type: LEGACY

Run Trip Number: Get

Run

Business Rule

Resolution Path

Where Clause

Error Msg.

Validation Description

WHERE (cleith_keel_len < 10 OR cleith_keel_len > 250)

CLEITH_KEEL_LEN is outside database range

Create Date 02-MAY-2002 08:01

Created By JPAPPAS

Last Mod Date 14-OCT-2002 10:12

Last Mod By JPAPPAS



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin



LODS Data Issues Manager

Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

Id 4

Issue Status **Closed**

Data Status **Corrected**

Schema **OPDT**

Tab Name **OBSTRIPTAB**

Key Fields **TRIP#**

Key Values **LL0453**

Field at Issue **PERMIT**

Issue Data Value **LL0453**

Proposed Correction

Actual Correction **630817**

Create Date 13-NOV-2002 10:35:24

Created By NEMOBS

Last Mod Date 25-SEP-2002 10:50:38

Last Mod By NEMOBS

Show... Last Query

LODS Data Issues Manager

NOAA Fisheries Pacific Islands Region

Hawaii Longline Observer Program

LODS

Validation Record: 664/665

Print Issue Type

Exit

Print

Clear

Save New << First < Prev Next > Last >>

Reported

Date 12-SEP-2001 00:00 By KSENDER

Invalid permit # (trip num used).

Rpt Notes

Reviewed

Date 12-DEC-2001 00:00 By JPAPPAS

Data had previously been corrected in Access database (unknown date); load on Dec. 6, 2001 corrected the target

Rvw Notes

Updated

Date 06-DEC-2001 00:00 By JPAPPAS

Add Notes



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin

Reference Code Management



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

Longline Observer Data System - Reference CodeTables

User JPAPPAS

Trips Table Trip Status Trip Type Set Environ Table Beaufort Scale Haulback Dir Gear Cfg Table Hk Type Bait Line Mat Ldr Mat	Catch Table Caught Cond Kept/Return Meas Type Mortality Cause PS Interaction Table PSI Event Type Vessel Activity Sighting Method Behavior Type PSI Condition	Turtle Life Hist Table Turtle Species Turtle Dorsal Color Bird Table Bird Species Bill Color Mantle Color Head Color Mammal Table Mammal Species Tag Events Table Tag Event Type Tag Type Tag Location Tag Material	----- Multi-use Code Tables ----- Misc Form Type Color Comment Type Image Formats Animal-related Gender Animal Disposition Fish/Shark Spec Type Species Codes Exit	Gear-related Hooked Loc Entangled Loc Gear Removal Type Gear Attached Type Lite Device Type Lite Device Prox Environment Weather Type
---	--	--	---	---

Display SPECIMEN TYPE reference code table

Record: 1/1

Measurement Type Codes



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

Forms Help Query Help

8 LOP Measurement Type

ID	Measurement Type	Code Value	Alias	Descrip	From Vers Id	To Vers Id	Created By	Create Date	Last Mod By	Last Mod Date
1348	FL	Fork length			1001		NEWOBS	27-NOV-02 1448	NEWOBS	27-NOV-02 1448
1349	TL	Total length			1001		NEWOBS	27-NOV-02 1448	NEWOBS	27-NOV-02 1448
1350	EF	Eye-to-fork			1001		NEWOBS	27-NOV-02 1448	NEWOBS	27-NOV-02 1448
1351	CK	Cleithrum-to-keel			1001		NEWOBS	27-NOV-02 1449	NEWOBS	27-NOV-02 1449
1352	DD	Alternate length	D1 - D2		1001		NEWOBS	27-NOV-02 1449	NEWOBS	27-NOV-02 1451
1353	CI	Clasper inner length			1001		NEWOBS	27-NOV-02 1450	NEWOBS	27-NOV-02 1450
1354	PC	Precaudal length			1001		NEWOBS	27-NOV-02 1450	NEWOBS	27-NOV-02 1450
1355	HG	Half girth			1001		NEWOBS	27-NOV-02 1451	NEWOBS	27-NOV-02 1451

< Prev First Rec Next > Last Rec

Save Query Exit

LOV

Reference Code Versioning



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

1 LOP Ref Code Versions [Forms Help](#) [Query Help](#)

ID	Vers Code	Current?	Effective From	Effective To	Descrip	Created By	Create Date	Last Mod By	Last Mod Date
1001	1.0	Y	15-NOV-2002		November 15, 2002 -- Current Code set	NEWOBS	15-NOV-02 1001	NEWOBS	15-NOV-02 1001

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[LOV](#)

Netscape 6

File Edit View Search Go Bookmarks Tasks Help

http://itsi.nmfs.hawaii.edu:7777/htdocs/lop/html/lods-codes.html

LODS Reference Codes

Printed on 14-OCT-2003 13:36:42

Table of Contents

LOP_AGE_CLASS	LOP_ENTANGLED_LOC	LOP_LITE_DEVICE_TYPE	LOP_TAG_TYPE
LOP_ANIMAL_DISPOSITION	LOP_FORM_TYPE	LOP_MAMMAL_SPECIES	LOP_TRIP_STATUS
LOP_BAIT	LOP_GEAR_ATTACHED_TYPE	LOP_MEAS_TYPE	LOP_TRIP_TYPE
LOP_BEaufORT	LOP_GEAR_REMVL_TYPE	LOP_MORT_CAUSE	LOP_TURT_DORSAL_COLOR
LOP_BEHAVIOR_TYPE	LOP_GENDER	LOP_PSI_COND	LOP_TURT_SPECIES
LOP_BIRD_BILL_COLOR	LOP_HAULBK_DIR	LOP_PSI_EVENT_TYPE	LOP_VESS_ACTIVITY
LOP_BIRD_HEAD_COLOR	LOP_HK_TYPE	LOP_PST_COND	LOP_WEATHER_TYPE
LOP_BIRD_MANTLE_COLOR	LOP_HOOKED_LOC	LOP_PS_SPECIMEN_TYPE	
LOP_BIRD_SPECIES	LOP_IMAGE_FMTS	LOP_SIGHTING_METHOD	
LOP_CAUGHT_COND	LOP_KEPT_RETURN	LOP_SPECIMEN_TYPE	
LOP_COLOR	LOP_LDR_MAT	LOP_TAG_EVENT_TYPE	
LOP_COMMENT_TYPE	LOP_LINE_MAT	LOP_TAG_LOC	
LOP_DAMAGE	LOP_LITE_DEVICE_PROX	LOP_TAG_MAT	

LOP_AGE_CLASS

Ref Code	Alias	Code Value	Notes
01	Mature		
02	Immature		
03	Other		

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LOP_ANIMAL_DISPOSITION

Ref Code	Alias	Code Value	Notes
01	1 Previously dead		
02	2 Released unharmed		
03	3 Released injured		
04	4 Died		
05	5 Escaped		
06	6 Treated as catch		
07	7 Other/Unknown		

[Back to Top](#)

LOP_BAIT

Ref Code	Alias	Code Value	Notes
01	1 Large squid		
02	2 Small squid		
03	3 Saurv (sanma)		

Document: Done (1,141 secs)



Accomplishments (cont.): LODS Applications

- LODS Home
- Data Entry Application
- Data Element Registry
- Data Validation Manager
- Data Issues Manager
- Reference Code Management
- LODS Admin

Project Activities Log



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

LODS Administration Tools

LODS Administration
NOAA Fisheries Pacific Islands Region
Hawaii Longline Observer Program
LODS

Exit

News Lists FAQs TAs **Activities**

LODS Activity Log

Delete Save News Record: 19/19 Print

ID	Date	Persons Involved	Activity Type
13	25-APR-2003 00:00	JPAPPAS	History tables
8	16-APR-2003 00:00	JPAPPAS	E-R Diagrams
11	21-APR-2003 00:00	KSENDER, SARCENEAUX	Mtg
10	18-APR-2003 00:00	JPAPPAS	Circulars
15	26-JUN-2003 00:00	JPAPPAS	View format info update
14	26-JUN-2003 00:00	JPAPPAS	able in new model format
16	23-SEP-2003 00:00	KSENDER	LODS DE
17	23-SEP-2003 00:00	JPAPPAS	LODS FAQ updated
18	22-SEP-2003 00:00	JPAPPAS	Data issues mgr
19	16-OCT-2003 11:45	KSENDER	Collection Forms

Catch Form - new form CL.03.10.16 - changed species name for species code 909 to Longnose Lancetfish from Northern Lancetfish.

PSI Form - new form PS.03.10.16 - corrected Vessel Activity Codes list per manual.

Create Date 16-OCT-2003
 Created By MEMOBS
 Last Mod Date 16-OCT-2003
 Last Mod By MEMOBS

Description
 ...

FAQ Manager



Oracle Developer Forms Runtime - Web

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LODS Administration Tools

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LODS

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News Lists **FAQs** TAs Activities

FAQ

Delete Save Add << First < Prev Next > Last >> Print

FAQ Number 21
Post Datetime 10-OCT-2003 08:10
Author JPAPPAS
Keywords access, data entry
Title LODS FAQ (Longline Observer Data System - Frequently Asked Questions)

How do I access LODS Data Entry?

Create Date 10-OCT-2003 08:11
Created By JPAPPAS
Last Mod Date 14-OCT-2003 09:52
Last Mod By JPAPPAS

Open your Internet browser (Internet Explorer or Netscape) and access the URL <http://itsi.nmfs.hawaii.edu:7777/htdocs/lop/html/lods.html>. When the LODS screen appears, click ONCE on LODS.

News Record: 1/22

Question

Answer

LODS News



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LODS

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News Lists FAQs TAs Activities

Delete Save Add << First < Prev Next > Last >>

Date/Time 15-OCT-2003 04:00 News Record: 1/12

To LODS users

From KSender, JPappas

Print

motd

Please check out the LODS FAQs (Frequently Asked Questions), now available online from the LODS home page. Lots of helpful hints for entering your data. New questions and answers are added as the need arises.

Create Date 15-OCT-2003
Created By JPAPPAS
Last Mod Date 17-OCT-2003
Last Mod By JPAPPAS

...

Notice Text

Project Circulars Management



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

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NOTE: Table is under construction.
Not all circulars are available through this site.

Forms Help Query Help

Circ Id 1

Circ Seq

Circ Issuer Petersen, Donald A.

Circ Date 11-MAY-1994

Circ Title Field Manual Changes - Data Update Circular One

Issuer's Title Training Coordinator

Issued To Longline Observers

View Document

PIAO Data Update Circulars

Descrip

Changes to data collection instructions for:

- Gear Retrieval
- Vessel Specification Record
- Catch Tally Sheet

Also, five new species codes added: Unidentified Harshell Turtle: UH, Fraser's Dolphin: LH, Short-tailed Albatross: dAL, Oilfish: 014, and Dagger Pomfret: 907

- Protected Species Interactions and Sighting Record

< Prev First Rec Acrobat HELP Save Query

Next > Last Rec Exit LOV

Persons Management



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

PIAO Persons Table

Forms Help Query Help

189 Pers ID 1172

Last Name First Name Mi Initials

AH YEE JESSE JKA

Address City State Zip

Home Phone List Emerg Phone List

First Rec Last Rec

Email Address

Place for photo

Last Query to ASCII Save Query Exit

Insert Rec LOV

Employment Information

Active? Employer Job Title Hire Date

INACTIVE Saltwater Inc.

Obs # Username (8 characters) Database Job Work Phone List

904 Data Entry

Additional Info

Tab Vers Id Create Date Created By Last Mod Date Last Mod By

1009 11-APR-2003 09:28 JPAPPAS

Data Role Management



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

10 **Observer Longline Role Descriptions** [Forms Help](#) [Query Help](#)

Num	Role	Descrip
1	LOP_DFLT_ROLE	Granted as a default Oracle role to persons who will be using the LOP Data Entry or LOP Support application. Grants EXECUTE on a procedure that is used to set a user's additional LOP roles.
2	LOP_DE_ROLE	Grants SELECT (read), INSERT, UPDATE, and DELETE on all LOP data tables up until the trip is marked as Approved by a Debriefer. Once a trip is approved, persons with the LOP_DE_ROLE may only read the data; they cannot make changes. Also grants SELECT (read only) privilege on all LOP
3	LOP_DEBRIEF_ROLE	Persons with this role have all the privileges granted to the LOP_DE_ROLE plus the capability of approving trips. Persons with the LOP_DEBRIEF_ROLE may validate (run data checks against) a Completed trip. Persons with the LOP_DEBRIEF_ROLE may reassign a trip to a different person to
4	LOP_REFTAB_READ_ROLE	Grants SELECT (read only) privilege on all LOP Reference Code tables.
5	LOP_REFTAB_ADMIN_ROLE	Grants SELECT (read), INSERT and UPDATE privileges on the LOP Reference Code tables. DELETES are not allowed and must be handled by persons with the LOP_ADMIN_ROLE.
6	LOP_ADMIN_ROLE	Grants SELECT (read), INSERT, UPDATE and DELETE on all LOP objects (tables, views, packages, procedures, functions, sequences, constraints). Should be granted to only one or two people.

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Species Code Management



Oracle Developer Forms Runtime - Web

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WINDOW1

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Forms Help Query Help

Observer Longline Logbook Species Codes

Note: This form is not updateable
Submit new species codes to Dr. Robert Skillman

Update Groupings

Local Code	English Name	Species Grouping	Protected?	Protected Date
p89	BILLFISHES	BILLFISH		
092	STRIPED MARLIN	BILLFISH		
093	INDO-PACIFIC BLUE MARLIN	BILLFISH		
095	SAILFISH	BILLFISH		
090	BLACK MARLIN	BILLFISH		
091	SWORDFISH	BILLFISH		
094	SHORTBILL SPEARFISH	BILLFISH		
dNG	BLACK-FOOTED ALBATROSS	BIRDS		
aVE	BIRDS	BIRDS		
pSP	CORMORANTS	BIRDS		
pPL	PELAGIC CORMORANT	BIRDS		
pAU	DOUBLE-CRESTED CORMORANT	BIRDS		
pPN	BRANDT'S CORMORANT	BIRDS		
sSR	RED-FOOTED BOOBY	BIRDS		
sDP	MASKED BOOBY	BIRDS		
sLP	BROWN BOOBY	BIRDS		
aSP	ALCIDS	BIRDS		
dIM	LAYSAN ALBATROSS	BIRDS		

< Prev First Rec Next > Last Rec

Query LOV

Exit

Table Version Management



Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Help Window

WINDOW1

30 Table Versions Forms Help Query Help

Id	Vers	Vers	Current?	Data Mgt Name	Created By	Create Date	Last Mod By	Last Mod Date
1081	BILLFISH_LEGACY	10.0	Y	FC059	NEWOBBS	17-JAN-2003	NEWOBBS	17-JAN-2003
981	BILLFISH_LEGACY	9.0	N	FC059	NEWOBBS	17-JAN-2003	NEWOBBS	17-JAN-2003
1005	BIRD_MITIG	10.0	Y	FC056	NEWOBBS	27-NOV-2002	NEWOBBS	18-FEB-2003
905	BIRD_MITIG	9.0	N	FC056	NEWOBBS	15-JAN-2003	NEWOBBS	17-JAN-2003
1006	CATCH	10.0	Y	FC057	NEWOBBS	21-NOV-2002	NEWOBBS	17-JAN-2003
906	CATCH	9.0	N	FC057	NEWOBBS	15-JAN-2003	NEWOBBS	17-JAN-2003
1004	GEAR_CFG	10.0	Y	FC056	NEWOBBS	21-NOV-2002	NEWOBBS	17-JAN-2003
904	GEAR_CFG	9.0	N	FC056	NEWOBBS	15-JAN-2003	NEWOBBS	17-JAN-2003
1011	PHOTOS	10.0	Y	N/A	NEWOBBS	27-NOV-2002	NEWOBBS	17-JAN-2003
1009	PIAO_PERSONS	10.0	Y	N/A	NEWOBBS	21-NOV-2002	NEWOBBS	17-JAN-2003
1002	PORT_STOPS	10.0	Y	FC053	NEWOBBS	27-NOV-2002	NEWOBBS	17-JAN-2003
902	PORT_STOPS	9.0	N	FC053	NEWOBBS	15-JAN-2003	NEWOBBS	17-JAN-2003
1008	PS_INTERACT	10.0	Y	FC055	NEWOBBS	27-NOV-2002	NEWOBBS	17-JAN-2003
908	PS_INTERACT	9.0	N	FC055	NEWOBBS	15-JAN-2003	NEWOBBS	17-JAN-2003
1007	PS_TALLY	10.0	Y	FC058	NEWOBBS	21-NOV-2002	NEWOBBS	17-JAN-2003

Descrip

< Prev First Rec Save Query Exit

Next > Last Rec Insert R... LOV



Future Opportunities

- Apply tools and techniques developed for LODS to other data systems
- System process improvement from Issues Management and Data History statistics
- Integration of documentation tools and techniques into InPort metadata repository
- Work with FIS Professional Specialty Groups (PSG) to develop and promote NMFS data management best practices



Reviewing the Process

- Overcoming the politics of change



Reviewing the Process

- Overcoming the politics of change
- Doing it the *Hard Way*



Reviewing the Process

- Overcoming the politics of change
- Doing it the *Hard Way*
- FIS to the rescue



Everything I know, I learned at sea...

- Change happens, enjoy it!
- Passion and energy can often overcome a lack of resources
- If you want to keep the boat afloat, you need the whole crew
- If you want the boat to go in the right direction, you need a captain



Final Thoughts...

- The most accurate data are not defensible without adequate documentation
- Data management policies and guidelines need to be adopted
- Data management needs to be a forethought, not an afterthought when planning and budgeting projects
- Quality data management is not rocket science
- GIS, FGDC, NDQA, Data Integration require good data management



Success

Informed Decisions

Knowledge

Information

Data



End

Designing and Managing Fisheries Data Systems that Support the NOAA
Data Quality Act: A Case Study Using the Hawaii Longline Observer
Program

Karen Sender and Janet Pappas
NOAA Fisheries - Pacific Islands Fisheries Science Center
Honolulu, Hawaii

FIS Conference 2003
18 November 2003



Addendum

The following ten slides are presented to describe InPort, our working model of an integrated data registry and metadata repository

Karen Sender and Janet Pappas
NOAA Fisheries - Pacific Islands Fisheries Science Center
Honolulu, Hawaii

FIS Conference 2003
18 November 2003



InPort Metadata Repository

- Maintain a complete inventory of data
- Metadata are readily available on-line
- Automatically generate near final FGDC metadata records
- Reduce the waste of time and money
- Facilitate the sharing of data and information



InPort Information Objects

InPort



National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
Honolulu Laboratory



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Information Object Types

Project A	A program, project, or task that submits information and metadata to InPort.
Data Set	A data system, suite, or entity that contains data elements, such as a data file or a collection of specimens.
Database	Collections of data residing in a database management system.
Data Element	Information item that belongs to a data set.
Document	Published books, journals, meeting abstracts, reports, theses, conference proceedings, manuals, etc.
Multimedia	Imagery, video, audio, and related digital recordings.
Model/App	Algorithm, statistical model, data entry or data processing application, code snippets, etc.
Table	A structured collection of data elements in a relational database.
Column	A single element in a relational database table.
Equipment	Physical equipment owned or managed by a project.

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InPort Common Components

InPort



National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
Honolulu Laboratory



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Object Metadata Components

Related Info Objects	List of registered information objects that have a defined relationship to the information object.
Objectives	List of goals, objectives and reasons for acquiring, managing, or maintaining the information object.
References	List of laws, regulations, mandates, etc., pertaining to the information object.
Keywords	List of subject, place, taxonomic, or other theme keywords used to facilitate searching of information.
Person Roles	List of people and their roles in acquiring, managing, and using the information object.
Time Frame	Temporal limits of the information object which can be based on both time/date and an information item, (e.g. trip number).
FAQs	List of questions and answers that have been proven helpful to the understanding and use of the information object.
Quality Information	Details on usage constraints, completeness, and accuracy of the information object.
Access Information	Details on the access policy and access procedures of the information object.
Data Downloads	List of available files, images, and documents for the information object with details and links for obtaining them.
Geographic Area	Spatial bounds and geographic description of the information object.
Methods	List of methods, protocols, and procedures used to acquire, process or manage the information object.
Glossary	List of terms and definitions specific to the information object.
Usage Issues	List of problems, issues, concerns related to the information object.
Event History	List of events relating to the information object, including dates, event descriptions and person involved.
InPort Details	InPort administrative details for this information object.

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InPort Relationships

InPort



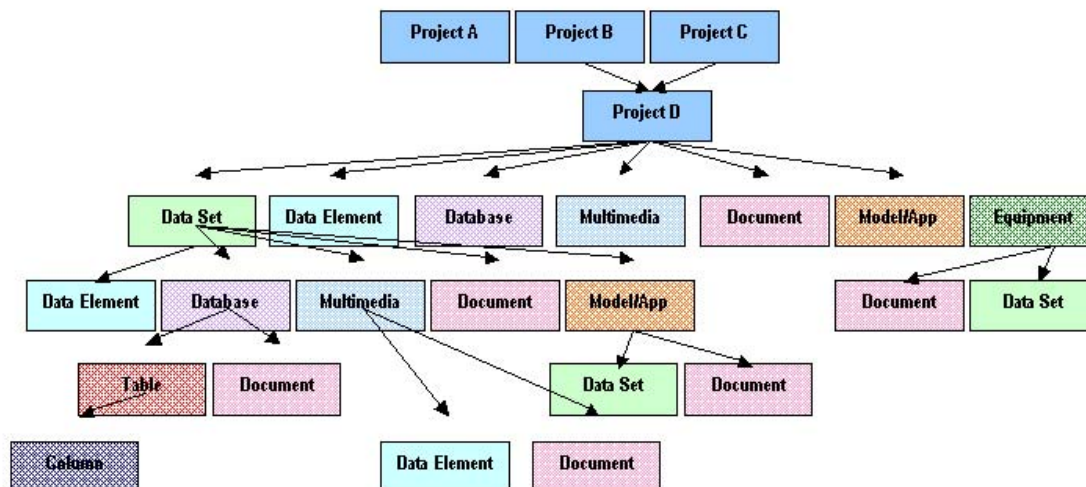
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
Honolulu Laboratory



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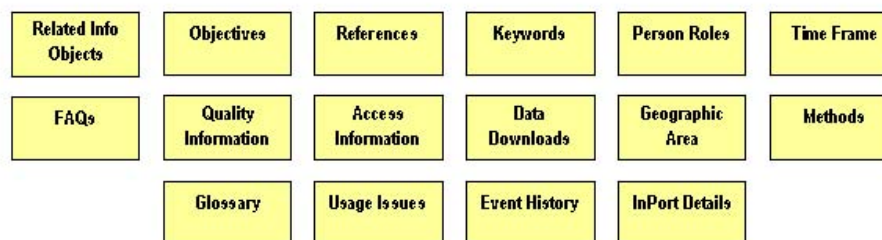
Information Object Types and Possible Relationships

Arrows show some possible parent-child relationships; however, any object can be defined as *related* to another via the *Related Info Object* common component.



Object Metadata Components

Every Information Object may have one or more Metadata Components



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InPort Main Page

InPort



National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
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Honolulu Laboratory Information Portal

I

Search

Search InPort for information on projects, data, documents, applications, people, events, FAQ's, standards and equipment.

Publish

Publish information to the Honolulu Laboratory InPort system.

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InPort Search

InPort



National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
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Honolulu Laboratory Information Portal

Enter a search string. Optionally select a specific information type and information field as is available in the drop down lists.

Information Object Search

Information Type

Data Set



Search for

Observer

in the

Title



Search



InPort Search Results

InPort



National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
Honolulu Laboratory



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Search Results

2 Records Found

	Type	RegID #	Status	<u>Title</u> Abstract
(1)	Data Set	2001	Active	Longline Observer Data Observation data collected on Longline Fisheries trips beginning in 1994.
(2)	Element	3001	Active	Longline Observer Trip Number Trip Number as recorded by Longline Observers, indicating the nth trip.

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InPort Object Profile

Information Object Profile

Title: Longline Observer Data

Identification:

Registry ID: 2001
Registry Status: Reviewed

Version Date: 16 Oct 2002

Data Type: Data Set
Data Status: Active

Parent Object: [2005](#)

Abstract: Observation data collected on Longline Fisheries trips beginning in 1994. The abstract will probably be much longer than this is.

Supplemental Information: Supplemental information on this object goes here in paragraph form. The supplemental information may be much longer than this is.

Objectives: Objectives go here in paragraph form. The objectives may be long.

Keywords (6)

Subject Keywords: Fisheries
Taxonomic Keywords: Tuna, Swordfish
Place Keywords: Palmyra, Jarvis, Hawaii

Time Frame

Start Date: 01/01/1994 **Start as of:** Trip LL0001
End Date:

Geographic Bounds

I

Bounding Coordinates in decimal degrees (positive North latitudes and Eastern longitudes):

Northern Boundary: 18.2345
Southern Boundary: -5.4321
Eastern Boundary: 155.0032
Western Boundary: -176.3333

References (1)

1. [RegID](#) CitationRecord goes here.



InPort Object Profile

Related Objects (2)

Type	RegID #	Status	Title	Relationship Description
1. Element	RegID	Reviewed	Trip#	Relationship information goes here.
2. Document	RegID	Reviewed	Observer Data Collection Manual	Relationship information goes here.

Documents (2)

	Year	RegID #	Doc Type	Title
1.	1999	RegID	Article	Document Title Goes Here
2.	1998	RegID	Report	Observer Quarterly Report, 1998 Quarter 1

Methods (2)

Type	RegID #	Status	Method Name
1. Acquisition	RegID	Reviewed	Method Name1
2. View	RegID	Reviewed	Method Name2

Quality Assurance

Data Use/Constraints: Description of use and constraints goes here in paragraph form.

Roles (2)

Name: Janet Pappas
Org: [NMFS/SWFSC/HL](#)
Role: DBA
Primary Phone: 808-983-5309
Mobile Phone:
Fax: 808-983-2922
Primary email: janet.pappas@noaa.gov
Alternate email: jpappas@swfc2.hawaii.edu

Alternate Phone:
Pager:

Name: Karen L. Sender
Org: [NMFS/JIMAR](#)
Role: Application Developer
Primary Phone: 808-983-5387
Mobile Phone: 808-256-7483
Fax: 808-983-2922
Primary email: karen.sender@noaa.gov
Alternate email: ksender@swfc2.hawaii.edu

Alternate Phone:
Pager: 808-256-7483



InPort Object Profile

Access Information

Availability: Confidential

Access Policy: Summary data may be available, based on a minimum of boats in a given area for a given time period.

Access Procedures: Contact the data manager.

Data Access (2)

1. File Name: obs.xls
File Description:
File Type: MS Excel
Application Vers.: Office 2000
File Size (KB): 13.2
File Last Write Date: 10/20/2002
Compression Status: ZIP
Access Connection: HTTP

[View/Download](#)

2. File Name: obs.csv
File Description: Comma separated values.
File Type: ASCII
Application Vers.:
File Size (KB): 13.2
File Last Write Date: 10/20/2002
Compression Status: ZIP
Access Connection: FTP

[View/Download](#)

Additional Information

[FAQ's](#)

[Terminology](#)

[Object History](#)

[Calendar](#)

InPort Registry Details

Information Type: Data
Information Status: Active
Entry Date: 10/09/2002
Release Date: 10/26/2002
Retire Date:
Data Entry Person: JP

Subtype: Data Set

Revision Date:
Review Date: 10/09/2003